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REMARKS

Favorable reconsideration of this application, in light of the present amendment and in view of the following discussion, is respectfully requested.

Claims 1-13 are pending in the present application. Claims 1-3 and 7 are amended by the present amendment.

Rejections under 35 USC § 112

Claim 7 was rejected under 35 USC § 112, second paragraph for lack of antecedent basis. Claim 7 is amended to depend on claim 6, rather than claim 1, which provides antecedent basis for the phrase "the sequence number."

Accordingly, it is respectfully requested this rejection be withdrawn.

Claims 1-3 were rejected under 35 USC § 112, second paragraph as indefinite. Accordingly, claims 1-3 are amended to correct minor informalities and to better conform to standard claim drafting practice, and it is respectfully requested this rejection also be withdrawn.

Rejections under 35 USC § 102

Claims 1, 2, 4 and 6-9 were rejected under 35 USC § 102(b) as unpatentable over European patent number 459,134 A2 to Georgiadis. This rejection is respectfully traversed.

Georgiadis is directed to a semi-dynamic load balancer which tabulates blockages between transaction types in an affinity matrix. In the load balancer of Georgiadis, transaction types are reallocated based on the affinity matrix when an overloaded computer is detected.

In contrast, independent claim 1 recites:

... detecting a change in the communication data size of the connection;
recording a maximum size value of the communication data size; and
judging, if the communication data size of the connection decreases with respect to the recorded maximum size value, that said server is under a high load.

Similar features are recited in independent claims 8 and 9.

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In a non-limiting example, the data size per connection time on a communication line indicates whether a server is under high load because the server shares storage resources (e.g. buffers) equally among each connection for storing packet data forwarded from clients. Upon receipt of a subsequent packet from a client, the server notifies the client of the data size which can be stored in the storage resource (buffer), and the client sends to the server data having a size in concordance with the notification from the server (see the specification at page 7, line 17 to page 8, line 3).

As an advantage, in a further non-limiting example, a high-load state of a server may be determined by detecting the data size per connection time on a communication line—that is, in a TCP network, a lower data size indicates higher load (see the specification at page 8, lines 4-6 and page 7, lines 14-16).

In further contrast, Georgiadis at page 5, lines 30-49 only discusses deciding whether a computer is overloaded based on CPU busy time (in particular, see Georgiadis at page 5, lines 26 and 27). It is respectfully submitted accumulated CPU busy time, as discussed in Georgiadis, is different from "recording a maximum size value of the communication data size," as recited in independent claims 1 (and similarly recited in independent claims 8 and 9).

Further, Georgiadis at page 5, lines 43 and 44 only discusses redistributing load to ensure "utilization of all the units will stay below a given threshold." It is respectfully submitted such redistribution to maintain utilization below a threshold is different from "judging, if the communication data size of the connection decreases with respect to the recorded maximum size value, that said server is under a high load," as recited in independent claim 1 (and similarly in independent claims 8 and 9).

Moreover, because Georgiadis only concerns CPU utilization, it is respectfully submitted Georgiadis does not discuss or suggest at least "detecting a change in the communication data size of the connection."

Accordingly, it is respectfully submitted independent claims 1, 8 and 9 and each of the claims depending therefrom patentably distinguish over Georgiadis.

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Claims 10-13 were rejected under 35 USC § 102(e) as unpatentable over US patent number 6,070,191 to Narendran. This rejection is respectfully traversed.

Narendran is directed to a server system for processing client requests over a communication network including document servers and at least one redirection server. Narendran at col. 6, line 52 to col. 7, line 60 discusses a "binning algorithm" which selects a random one of the document servers and a document, respectively, and places as large a portion of the document on the document server. Narendran discusses that an "access rate" for the document and an "access rate capacity" of the document server are known, and the portion of the document placed on the document server corresponds to the ratio of the document's access rate which is equal to the access rate capacity of the document server. When the access rate of the document exceeds that of the document server, the remaining portion of the document is then placed on another of the document servers, and so on.

In contrast, independent claim 10 recites "obtaining throughputs of said server, said client and a route by counting them, determining a correspondence between the data and said server by use of a function according to a service distribution rate based on the throughput, and transferring this correspondence to said connection management means."

As an advantage, in a non-limiting example, the service sharing rate may be adjusted in relation to a distribution of the throughputs of an on-service client and a route, and hence it is possible to automatically respond when a ratio of the clients from a remote place and a near place changes (see the specification at page 14, lines 3-7).

Further, Narendran at col. 6, line 52 to col. 7, line 60 only discusses a "binning algorithm" for assigning documents to servers. However, Narendran does not discuss or suggest at least "determining a correspondence between the data and said server ... and transferring this correspondence to said connection management means," as recited in independent claim 10.

Moreover, Narendran only discusses "access rate capacity" with regard to a "document server," but does not discuss or suggest "obtaining throughputs of said server, said client and a route by counting them," as recited in independent claim 10. Rather, the "access rate" of a document in Narendran is different from a throughput of a client, and the "access rate capacity" of a server in Narendran is different from a throughput of a server which is obtained by counting, as recited in independent claim 10. In fact, Narendran at col. 6, line 52 to col. 7, line 60 does not discuss or suggest "obtaining throughputs ... by counting" because the "access rate" and "access rate capacity" discussed in Narendran are set prior to operation of the server system.

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Accordingly, it is respectfully submitted independent claim 10 and each of the claims depending therefrom patentably distinguish over Narendran.

Rejection under 35 USC § 103

The outstanding Office Action at page 7 rejects claims 3, 5 and 10-13 under 35 USC § 103(a) as unpatentable over Georgiadis.

Claims 3 and 5 depend on independent claim 1, which as discussed is believed to patentably distinguish over Georgiadis. Accordingly, it is respectfully submitted claims 3 and 5 also patentably distinguish over Georgiadis.

Regarding claims 10-13, it is respectfully submitted this rejection is improper and should be withdrawn. In particular, 37 CFR 1.104(c)(2) states:

... when a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.

Further, MPEP 706.02(j) states:

... After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office action:

(A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate ...

However, the outstanding Office Action only discusses Georgiadis in relation to claims 3 and 5, but does not discuss claims 10-13 in any detail.

Accordingly, it is respectfully submitted the rejection of claims 10-13 under 35 USC 103(a) is improper, and it is respectfully requested this rejection be withdrawn.

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Conclusion


Consequently, in light of the above discussion and in view of the present amendment, this application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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